Group DEC1617 - Miniature Greenhouse for Precision Agriculture

Victor Gomez (Communication Leader)  Esdras Murillo (Team Leader)
Pat Martin (Webmaster)  Yufeng Huang (Key Concept Holder)
Romina Rivadeneira (Webmaster)  Austin Zehr (Key Concept Holder)

Advisor: Dr. Liang Dong

- **Weekly Summary (Short summary about what you did this week):**
The team has made progress on all of the aspects of the miniature greenhouse system. A cover plate for the cooling system is being created on Solid Works. The team is also working on finding ways to expand the previously designed water pump system. Research has also begun in an LED lighting system as well as solutions for the robotic arm.

- **Past week accomplishments (please describe as what was done, by whom, when):**
  - The team has started to develop the website and project plan.

- **Pending issues:**
  - Project Plan needs to be finished by the end of this upcoming week.

- **Individual contributions**

<table>
<thead>
<tr>
<th>NAME</th>
<th>Individual Contributions</th>
<th>Hours this week</th>
<th>Hours Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Esdras</td>
<td>Started to work on understanding the hardware part of the system</td>
<td>6</td>
<td>12</td>
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<tr>
<td>Pat</td>
<td>Worked on lighting and air flow system</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Yufeng</td>
<td>Designing improvement for previous cooling system model in SolidWorks</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Romina</td>
<td>Working on system code for water pump system.</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Austin</td>
<td>Researching on robotic arm system.</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Victor</td>
<td>Researching LED options for lighting system.</td>
<td>3</td>
<td>9</td>
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</tbody>
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• **Plan for coming week (please describe as what, who, when)**
  o **Esdras**
    ▪ Needs to understand the board capabilities of the design made on Simulink
  o **Romina**
    ▪ Work to understand more of the Arduino functionalities with a capable model in the meantime
  o **Pat**
    ▪ Continue research on piezo electric water pump system
  o **Yufeng**
    ▪ Finish improved cover for cooling system. Check with advisor to see if final product is ready to be 3D printed.
  o **Victor**
    ▪ Research more on LED options for lighting system.
    ▪ Order enough supplies to begin testing lighting solutions.
  o **Austin**
    ▪ Meet with Xinran and review coding language for robotic arm.
    ▪ Begin brainstorming solutions for gripper attachment.

• **Summary of weekly advisor meeting (if applicable/optional)**

  No meeting with advisor this week. He was out of town.